

**UNITED STATES DISTRICT COURT
DISTRICT OF DELAWARE**

DATA CLOUD TECHNOLOGIES, LLC,
Plaintiff,

v.

CALIX, INC.,
Defendant.

CIVIL ACTION NO. _____

JURY TRIAL DEMANDED

ORIGINAL COMPLAINT

Plaintiff DataCloud Technologies, LLC (hereinafter, “Plaintiff” or “DataCloud”), by and through its undersigned counsel, files this Original Complaint for Patent Infringement against Defendant Calix, Inc. (hereinafter, “Defendant” or “Calix”) as follows:

NATURE OF THE ACTION

1. This is a patent infringement action to stop Defendant’s infringement of the following United States Patents (collectively, the “Patents-in-Suit”), copies of which are attached hereto as **Exhibit A**, **Exhibit B**, **Exhibit C**, and **Exhibit D**, respectively:

	U.S. Patent No.	Title
A.	6,560,613	Disambiguating File Descriptors
B.	6,651,063	Data Organization And Management System And Method
C.	7,209,959	Apparatus, System, And Method For Communicating To A Network Through A Virtual Domain Providing Anonymity To A Client Communicating On The Network
D.	8,762,498	Apparatus, System, And Method For Communicating To A Network Through A Virtual Domain

2. Plaintiff seeks injunctive relief and monetary damages.

PARTIES

3. DataCloud is a limited liability company organized and existing under the laws of the State of Georgia and maintains its principal place of business at 44 Milton Avenue, Suite 254,

Alpharetta, Georgia, 30009 (Fulton County).

4. Based upon public information, Calix is a corporation duly organized and existing under the laws of the state of Delaware since August 17, 1999.

5. Based upon public information, Calix has its principal place of business located at 2777 Orchard Parkway, San Jose, California, 95134 (Santa Clara County).

6. Based upon public information, Calix also has facilities at the following locations:

- 1435 N. McDowell Blvd. Suite 200, Petaluma, California, 94954
- 505 US Highway 169 North, Suite 400, Plymouth, Minnesota, 55441
- 2350 Campbell Creek Blvd., Suite 100, Richardson, Texas 75082

7. Defendant may be served through its registered agent, Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

JURISDICTION AND VENUE

8. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

9. The Court has personal jurisdiction over Calix because: Defendant has minimum contacts within the State of Delaware and in this District; Defendant has purposefully availed itself of the privileges of conducting business in the State of Delaware and in this District; Defendant has sought protection and benefit from the laws of the State of Delaware and is incorporated there; Defendant regularly conducts business within the State of Delaware and within this District, and Plaintiff's causes of action arise directly from Defendant's business contacts and other activities in the State of Delaware and in this District.

10. More specifically, Calix directly and/or through its intermediaries, ships,

distributes, makes, uses, imports, offers for sale, sells, and/or advertises its products and services in the United States, the State of Delaware, and in this District.

11. Based upon public information, Calix solicits customers in the State of Delaware and in this District and has many paying customers who are residents of the State of Delaware and this District and who use its products in the State of Delaware and in this District. Calix is also incorporated in the State of Delaware and in this District.

12. Venue is proper pursuant to 28 U.S.C. §1400(b) because Calix resides in the District of Delaware because of its formation under the laws of Delaware.

13. Venue is proper pursuant to 28 U.S.C. § 1391(b) and (c) because Calix resides in the District of Delaware because of its formation under the laws of Delaware, which subjects it to the personal jurisdiction of this Court.

BACKGROUND INFORMATION

14. The Patents-in-Suit were duly and legally issued by the United States Patent and Trademark Office (hereinafter, the “USPTO”) after full and fair examinations.

15. Plaintiff is the owner of the Patents-in-Suit, and possesses all right, title and interest in the Patents-in-Suit including the right to enforce the Patents-in-Suit, the right to license the Patents-in-Suit, and the right to sue Defendant for infringement and recover past damages.

16. Plaintiff has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit.

17. Plaintiff does not sell, offer to sell, make, or use any products itself, so it does not have any obligation to mark any of its own products under 35 U.S.C. § 287.

18. By letter dated December 14, 2020, DataCloud’s licensing agent sent Defendant information in which it identified DataCloud’s patent portfolio, which includes each of the Patents-in-Suit (hereinafter, the “Licensing Letter”). By letter dated March 5, 2021, DataCloud put

Defendant on notice of its infringement of the Patents-in-Suit (hereinafter, the “Notice Letter”).

DEFENDANT’S PRODUCTS AND SERVICES

19. Based upon public information, Calix owns, operates, advertises, and/or controls the website www.Calix.com through which it advertises, sells, offers to sell, provides and/or educates customers about its website design products and services. *See Exhibit E.*

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,560,613

20. Plaintiff re-alleges and incorporates by reference each of the paragraphs above.

21. U.S. Patent No. 6,560,613 (hereinafter, the “’613 Patent”), was issued on May 6, 2003 after full and fair examination by the USPTO of Application No. 09/500,212 which was filed on February 8, 2000. *See Ex. A.* A Certificate of Correction was issued on August 26, 2003. *See id.*

22. Based upon public information, Plaintiff is informed and believes that Defendant has infringed one or more claims of the ’613 Patent, either literally or under the doctrine of equivalents, because it ships distributes, makes, uses, imports, offers for sale, sells, and/or advertises its Passive Optical Network (“PON”) module products that provide the DOCSIS virtualized network function (VNF) and DPx, including the those PON products like the E3-2 (the “Calix PON Products”).

23. Based upon public information, Plaintiff is informed and believes that Calix’s PON Products meet each and every element of at least Claim 8 of the ’613 Patent, either literally or equivalently.

24. Based upon public information, the Calix PON Products have infringed one or more claims of the ’613 Patent, including Claim 8, because they provide a method for disambiguating file descriptors in a computer system (using KVM and VMWare through a process which intercepts the system calls that store files on media, stores one or more file type indicators for each

file descriptor in a table, and determines what file type is associated with the file descriptor based on a review of the stored file type indicators. KVM and VMWare, which are incorporated in the Calix PON Products, employs disambiguation of file descriptors (files/sockets/pipes) that are used in shadowed I/O system call routines by intercepting them, storing related indicators (*e.g.*, reference to images), and examining those stored indicators to determine the associated file type.

25. Defendant's aforesaid activities have been without authority and/or license from Plaintiff.

26. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant's wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6,651,063

27. Plaintiff re-alleges and incorporates by reference each of the paragraphs above.

28. U.S. Patent No. 6,651,063 (hereinafter, the "'063 Patent"), was issued on November 18, 2003 after full and fair examination by the USPTO of Application No. 09/493,911 which was filed on January 28, 2000. *See* Ex. B. A Certificate of Correction was issued on February 3, 2004. *See id.*

29. Based upon public information, Plaintiff is informed and believes that Defendant has infringed one or more claims of the '063 Patent, either literally or under the doctrine of equivalents, because it ships distributes, makes, uses, imports, offers for sale, sells, and/or advertises its "CommandIQ® App".

30. Upon information and belief, the CommandIQ® App meets each and every element of at least Claim 4 of the '063 Patent, either literally or equivalently.

31. Based upon public information, the CommandIQ® App has infringed one or more

claims of the '063 Patent, including Claim 4, because it provides a method for providing information to one or more users by storing information in an “information pack” (uploading to servers/saving APK/image files, e.g., CommandIQ_v21.2.1_apkpure.com.apk) associated with a user destination address (e.g., “2607:f8b0:4009:805::200e”) associated with a plurality of data repositories (e.g., “SM-J337A\Phone\Android\data . . .”) associated with at least one of those users (e.g., “SM-J337A”) and associating that information pack with a “provider identifier” (e.g., “OU-Calix CN-Calix”). The information pack is sent to the specified data repository (e.g., *via* TCP) and stored there in a location reserved for the specified category identifier that is specifically created for the information pack (e.g., file folder of “com.calix.smarthome” is reserved for information), and a “custom category identifier” (e.g., the signature or “Modulus”) is assigned to the information pack. The custom category identifier is subsequently used to identify other information packs that should be stored in the same location based on matching category identifiers (e.g., valid Android APK files contain a signature which allows to identify the author of the APK file, which allows verification that an updated version comes from the same author).

32. Defendant’s aforesaid activities have been without authority and/or license from Plaintiff.

33. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant’s wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 7,209,959

34. Plaintiff re-alleges and incorporates by reference each of the paragraphs above.

35. U.S. Patent No. 7,209,959 (hereinafter, the “’959 Patent”), was issued on April 24, 2007 after full and fair examination by the USPTO of Application No. 09/542,858 which was filed

on April 4, 2000. *See* Ex. C.

36. Based upon public information, Plaintiff is informed and believes that Defendant has infringed one or more claims of the '959 Patent, either literally or under the doctrine of equivalents, because it ships distributes, makes, uses, imports, offers for sale, sells, and/or advertises products employing its website infrastructure (the "Calix Infrastructure Products").

37. Calix Infrastructure Products, Calix Infrastructure Products meet each and every element of at least Claim 1 of the '959 Patent, either literally or equivalently.

38. Based upon public information, Defendant has infringed one or more claims of the '959 Patent, including Claim 1, because it provides a method of, in response to a request (e.g., ""Client Hello") by a client (e.g., 10.0.0.3) to initiate communication with a destination website (e.g., www.calix.com); setting up a forwarding session (e.g., from the internet to a WWW server) between the client (e.g., internet device) and a destination server corresponding to the destination website (e.g., WWW server), the forwarding session employing a forwarder disposed between (e.g., a front-end server switch) the client and the destination server to forward packets sent from the client to the destination server and to forward packets sent from the destination server to the client (e.g., bilateral communications); employing the forwarder (e.g., front-end server switch), to transfer packets (e.g., ethernet or others) between the client (e.g., internet device) and the destination server (e.g., WWW server) during the forwarding session, wherein the forwarding session is set up and implemented such that neither the client or the destination server is aware of the employment of the forwarder (e.g., the WWW server has a direct TCP connection between a local address of, say, 172.31.15.21:22 and a client address of, say, 96.72.88.222:64947; thus, neither the client or the destination server is aware of the employment of the forwarder); employing a controller configured to communicate (e.g., firewall) with the forwarder (e.g., front-end server

switch) and a domain name server (*e.g.*, a DNS), wherein the controller queries the domain name server to resolve the name of the destination website (*e.g.*, *www.calix.com*) associated with the destination server (*e.g.*, WWW server) and initiates communication (*e.g.*, between the firewall and front-end server switch) with the forwarder in response to an answer from the domain name server to resolve the name of the destination website associated with the destination server; employing a deceiver (*e.g.*, router) configured to communicate with the controller (*e.g.*, firewall) and the client (*e.g.*, internet device), wherein the deceiver receives the request by the client to initiate communication (*e.g.*, from the internet to the router) with the destination website (*e.g.*, *www.calix.com* on a WWW server) and initiates the controller to query the domain name server to resolve the name of the destination website associated with the destination server (*e.g.*, the router both (i) receives the request and (ii) sends the data from the WWW server in a manner that makes the router appear to be the source of the data, when the source of the data is actually the WWW server); and in response to the controller (*e.g.*, router) receiving the answer from the domain name server and initiating communication with the forwarder initiating the forwarding session.

39. Defendant's aforesaid activities have been without authority and/or license from Plaintiff.

40. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant's wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 8,762,498

41. Plaintiff re-alleges and incorporates by reference each of the paragraphs above.

42. U.S. Patent No. 8,762,498 (hereinafter, the "'498 Patent"), was issued on June 24, 2014 after full and fair examination by the USPTO of Application No. 13/731,731 which was filed

on December 31, 2012. *See* Ex. D.

43. Based upon public information, Plaintiff is informed and believes that Defendant has infringed one or more claims of the '498 Patent, either literally or under the doctrine of equivalents, because it ships distributes, makes, uses, imports, offers for sale, sells, and/or advertises products employing its web servers using TLS 1.2 ("Calix Web Servers").

44. Upon information and belief, the Calix Web Servers meet each and every element of at least Claim 1 of the '498 Patent, either literally or equivalently.

45. Based upon public information, Calix Web Servers have infringed one or more claims of the '498 Patent, including Claim 1, because it provides a system of hardware and software that is configured to respond to a request for data by identifying a virtual namespace destination IP address (*e.g.*, either 52.8.242.244 and 13.57.144.219) from a selection of categories (*e.g.*, blastwifi.com, calix.com, gigaspire.net) that is related to the virtual namespace destination address (*e.g.*, calix.com is related to the virtual namespace destination address of www.calix.com) to determine a device with a specific forwarder IP address (Calix operates a forwarder device with a forwarder IP address and the selected web server will operate with a destination IP address and instruct it to send the request for data to the destination IP address and the forwarder device it instructed to send the request data to the destination IP address (*e.g.*, through a WWW server and SNI Routing).

46. Defendant's aforesaid activities have been without authority and/or license from Plaintiff.

47. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant's wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35

U.S.C. § 284.

JURY DEMAND

48. Plaintiff demands a trial by jury on all issues.

PRAYER FOR RELIEF

49. Plaintiff respectfully requests the following relief:

- A. An adjudication that one or more claims of the Patents-in-Suit has been infringed, either literally and/or under the doctrine of equivalents, by Calix;
- B. An award of damages to be paid by Calix adequate to compensate Plaintiff for Calix's past infringement, including interest, costs, and disbursements as justified under 35 U.S.C. § 284 and, if necessary to adequately compensate Plaintiff for Calix's infringement, an accounting of all infringing sales including, but not limited to, those sales not presented at trial;
- C. That this Court declare this to be an exceptional case and award Plaintiff its reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and,
- D. Any further relief that this Court deems just and proper.

Dated: November 18, 2021

Respectfully submitted,

Stamoulis & Weinblatt, LLC

/s/ Stamatios Stamoulis

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LIST OF EXHIBITS

A. U.S. Patent No. 6,560,613

B. U.S. Patent No. 6,651,063

C. U.S. Patent No. 7,209,959

D. U.S. Patent No. 8,762,498

E. Webpage: Services Offered